

## **WHAT IS CLAIMED:**

1. A method for improving the performance of an amplifier circuit comprising:
  - sensing the current in the input stage;
  - feeding said current to the output stage bias circuit to boost the output bias.
2. The method of claim 1, wherein the current is sensed and fed to the output stage bias circuit via a current mirror.
3. The method of claim 2, where the current at the entry terminal of the input stage transistor is the mirrored current.
4. The method of any of claims 1-3, wherein the circuit comprises BJTs.
5. The method of any of claims 1-3, wherein the circuit comprises FETs.
6. The method of any of claims 1-3, wherein the circuit comprises a combination of BJTs and FETs.
7. A transistor circuit, comprising:
  - an input stage;
  - an output stage with a biasing circuit; and
  - a current mirror, which senses the input signal current and feeds it to the output stage biasing circuit.
8. The circuit of claim 7, where the circuit comprises BJTs.
9. The circuit of claim 7, where the circuit comprises FETs.

10. The circuit of claim 7, where the circuit comprises a combination of BJTs and FETs.
11. A method of adaptively boosting the bias of an amplifier circuit, comprising:  
sensing the input signal; and  
boosting the output stage bias with a current equal or proportional to the input signal.
12. The method of claim 11, where the input signal is an RF signal.
13. The method of claim 12, where the input signal is sensed by a current mirror biasing circuit for the input stage.
14. The method of claim 13, where the collector current of an input stage BJT is mirrored by the current mirror and fed into an output stage biasing circuit.
15. The method of claim 13, where the drain current of an input stage FET is mirrored by the current mirror and fed into an output stage biasing circuit.
16. The method of any of claims 13-15, where the current mirror comprises BJTs.
17. The method of any of claims 13-15, where the current mirror comprises FETs.
18. A subcircuit, to be used in an amplification circuit, comprising:  
an input sensor, arranged to sense the input signal to the circuit; and  
an output stage booster, arranged to boost the bias of an output stage of the circuit in proportion to said input signal.
19. The subcircuit of claim 18, where the input signal is an RF signal.
20. The subcircuit of either of claims 18 or 19, where the input sensor is a current mirror.